# HYB 131-01B Anti MBL (human), biotinylated

*Mouse monoclonal antibody*

## OVERVIEW

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<thead>
<tr>
<th>Article No.</th>
<th>HYB 131-01B Anti MBL (human), biotinylated</th>
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<tbody>
<tr>
<td>Clone ID</td>
<td>3B6</td>
</tr>
<tr>
<td>Subclass</td>
<td>IgG1 / Kappa</td>
</tr>
<tr>
<td>Specificity</td>
<td>HYB 131-01B Anti-MBL (human), biotinylated is specific for MBL from human serum or plasma.</td>
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</tbody>
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**Species Reactivity:** Human

**Epitope Specificity:** The epitope specificity differs from that of HYB 131-10 and HYB 131-11.

**Immunogen:** MBL purified from human donor plasma.

**Fusion Partner:** X63-Ag8.653.

**Culture Medium:** Dulbecco’s modified Eagle’s medium with 10 % fetal calf serum

## TESTED APPLICATION

<table>
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<tr>
<th>Method</th>
<th>Usability</th>
<th>References</th>
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</thead>
<tbody>
<tr>
<td>Enzyme linked immunosorbent assay (ELISA)</td>
<td>Yes</td>
<td>In house analysis, 1</td>
</tr>
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</table>

HYB 131-01B, biotinylated is selective for detection of normally oligomerized MBL in a sandwich ELISA using HYB 131-01 as catching antibody (1).

## PROPERTIES

**Conjugation:** Biotinylated

**Form:** Liquid

**Preparation:** Protein A

**Concentration:** Lot specific. See Certificate of Analysis for details.

**Solvent:** PBS, pH 7.2 – 7.4

**Storage information:** Store at 2 - 8 °C.
Mannan-binding lectin (MBL), also called mannose-binding lectin or protein, is a C-type lectin and an important component in innate immunity. MBL is an oligomer i.e. forming dimers to hexamers of homotrimeric subunits of approximately 26 kDa polypeptides. This oligomerisation is essential for functional activity (2).

MBL forms a non-covalent complex with specific MBL-associated serine proteases (MASPs), termed MASP-1, -2, and -3. Upon binding to the surface of a pathogen, MASP-activation is initiated with subsequent complement activation and clearance through lysis or phagocytosis (3).

MBL-deficiency is the most common immune defect resulting in susceptibility to severe infections in early childhood, or if immuno-suppressed (4). MBL-deficiency has also been associated with several clinical disorders, e.g. autoimmune diseases, endocarditis, and septicaemia (4, 5).

Normal levels of oligomeric MBL in serum are 1 – 5 µg/mL whereas MBL-deficient serum levels are < 100 ng/mL, when estimated by a standard ELISA for MBL quantification (2). Due to the presence of different structural and promotor alleles 12 % or more of the Caucasian population have low concentrations (< 50 ng/mL) of normally oligomerized, functional MBL in plasma or serum (6).

REFERENCES